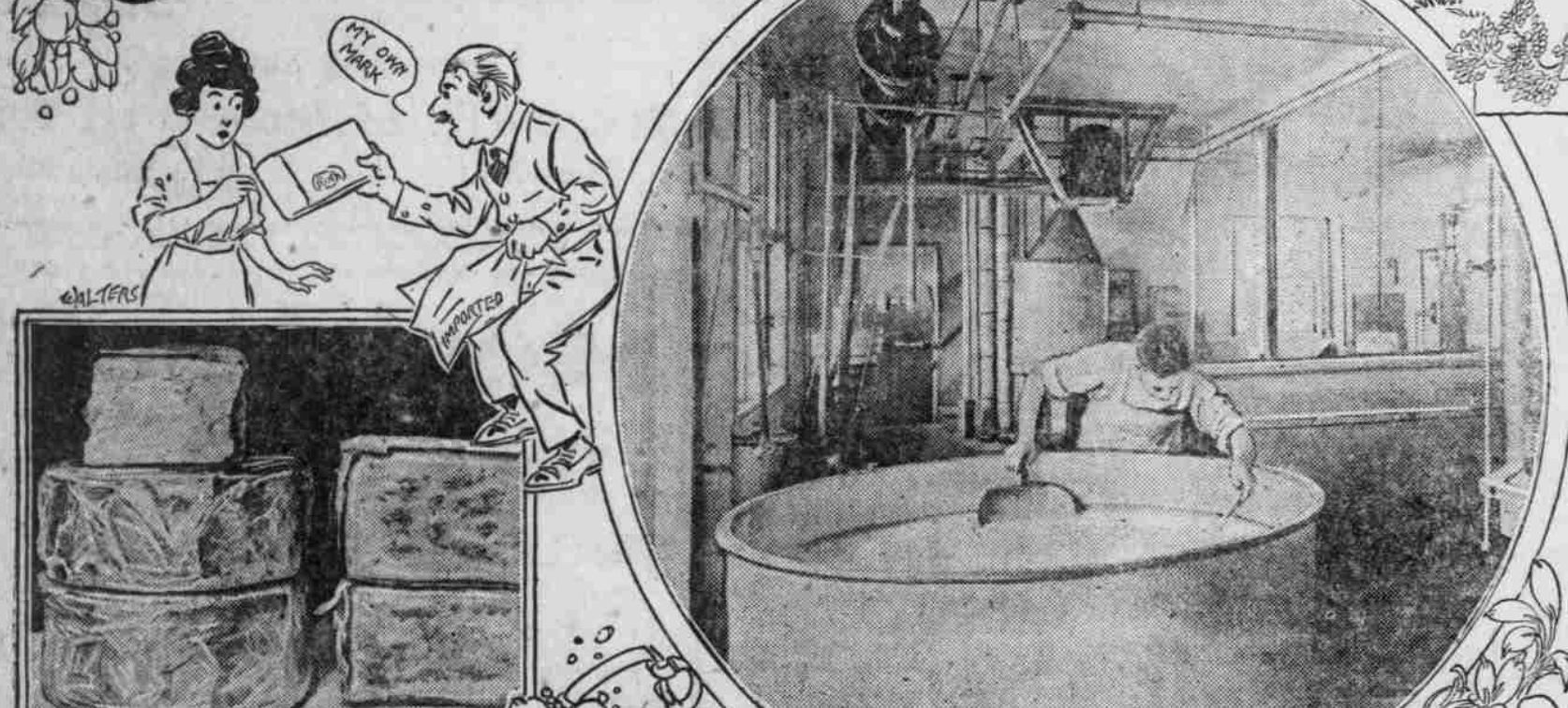


# Taking Swiss Cheese to Switzerland



ROQUEFORT FROM COWS MILK

Here is a story which is related with great gusto throughout the length and breadth of Green county, Wisconsin:

Chris Roth of Monroe is a manufacturer and wholesaler of American Swiss cheese. He knows the secrets of the cheese-makers who came from Switzerland to Green county in 1845. He makes good cheese, admits it and doesn't care who knows it. Some well-satisfied customers even went so far as to tell him his American Swiss cheese was better Swiss cheese than Swiss Swiss cheese.

Chris had a bright idea one day. He decided to find out just how much better was his American Swiss cheese than the Swiss Swiss cheese. So he wrote to Switzerland and ordered the very best Swiss cheese that could be had.

In due time the Swiss Swiss cheese arrived in Monroe. Chris, all impatient, made haste to open the shipment. Voluminous wrappings were removed one by one and at last the very best Swiss Swiss cheese was revealed in all its beauty. And on it was stamped the familiar legend:

"Chris Roth, Monroe, Green County, Wis., U. S. A."

By FRANK GEORGE.  
BEFORE this article was written some fifty persons were asked: "Why are there holes in a Swiss cheese?" A few of them said it was a profiteering dodge to cheat the public. Others admitted they didn't know; while some voiced the opinion that to punch a lot of holes in a cheese did seem to be a senseless sort of a procedure.

Of course a great many people know that the holes are there for a very good reason; that they are associated with good flavor. Without those holes there would not be any Swiss cheese that amounted to anything. But American scientists have racked their brains for years trying to learn how to manufacture holes comparable to those found in the finest products from Switzerland. They experimented and experimented. But it was no go. They could make small holes, yes, but the right kind of holes, holes that produce a cheese with a sweet, nutty flavor, were as elusive as a fox.

The scientists visited the greatest Swiss cheese producing section of the United States. During the year 1945, 27 Swiss families had migrated to the United States with a view to launching the manufacture of Swiss cheese in this country. These people explained several locations, and finally settled in the hills of Green county, Wisconsin. It was here, in the first can of milk manufactured into a miniature Swiss cheese, that the American Swiss cheese industry was born.

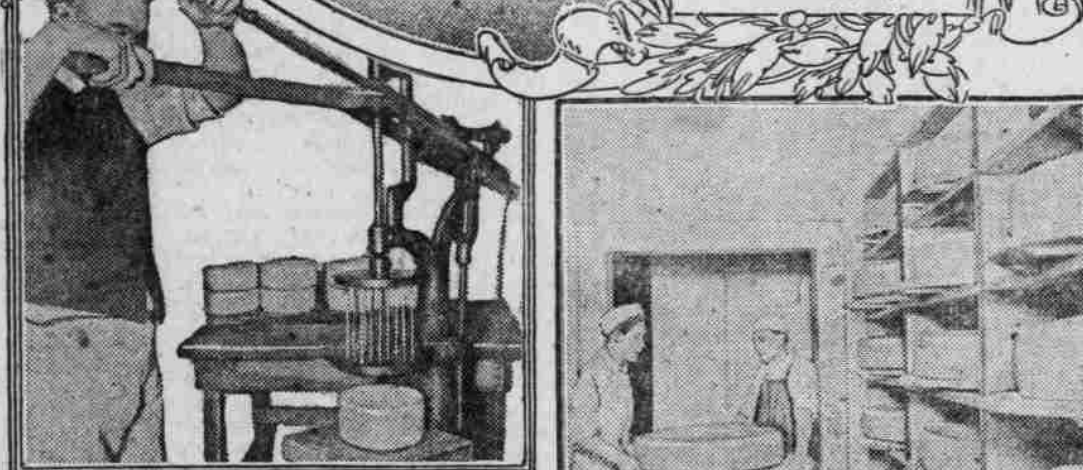
But when these Swiss people were questioned regarding their art they could tell nothing. From a scientific standpoint they no more knew what produced the holes in a Swiss cheese than did the writer of this article before he investigated the matter. If the cheese was good, they knew that they had made it so by the way they handled the curd; if it was poor, the farmers knew that they had not fed the cows properly. But in this blue-grass region of the state of Wisconsin, under mild and limonous, they recognized conditions similar to those in their own native alps, and for that reason favorable to the manufacture of a fair-er-kind of product.

Then the scientists went to Switzerland and tried to wheedle the secret out of the originators. But even there in the home of the Swiss cheese, the best-informed worker did not know the scientific principles involved. In fact, no one in Switzerland knew. The worker informed the scientists that he learned the trade from his father, and knew simply that if he did a certain thing to some gallons of milk and placed the result in a roller a Swiss cheese would be produced that was considered to be the best cheese manufactured anywhere in the world.

Finding the Right "Bug."  
The scientists returned to America no better informed than they were before. But they would not admit defeat. First of all they extracted all the bacteria that could be found in an imported Swiss cheese. There were thousands of different kinds of bacteria. Using a process of elimination they experimented with each "bug" in turn. This took some twelve years. And after it was all over, the identity of the particular "bug" that produced the hole in the cheese was still undisclosed.

Then the scientists connected with the dairy division, United States Department of Agriculture, concluded that although the proper bacteria had been experimented with, a different medium

MAKING AMERICAN SWISS CHEESE



MAKING HOLES IN ROQUEFORT

should be used. And sure enough, when they prepared a medium that suited them and tried a certain one of the thousands of bacteria upon it, the mystery was solved.

Consider what this discovery means to the American people. We are habitual consumers of such a vast quantity of Swiss cheese as to make necessary the importation of 20,000,000 pounds of it in a year. Why should not that demand be met with home-grown products? A few years ago it might have been argued that nothing was comparable to the cheese made in Switzerland. But not so now. In fact, many Swiss cheese experts have stated that the Swiss cheese now being manufactured at Grove City, Pa., under the supervision of the dairy division of the Department of Agriculture, is as good as the imported article, if not better.

At present some 20,000,000 pounds of Swiss cheese are produced in this country annually. Regrettably, too much of it is of mediocre quality. But with the application of the methods perfected by the dairy division, which make it possible to control the factors influencing ripening and flavor, it is confidently felt that the day is not far off when all of the domestic Swiss cheese will be of high quality, and that the supply will be adequate at least to satisfy the tastes of Americans who now prefer the imported article.

Already two carloads of American-made Swiss cheese have been exported to Switzerland—sent right into the country where Swiss cheese making has been the leading industry for more than five centuries. That is a real instance of carrying coals to Newcastle. And the Swiss people are finding that the coals are hot, for they are shrewd enough to perceive that now that America can manufacture the finest grades of Swiss cheese, Switzerland has a real competitor in the Swiss cheese-making industry.

The quality of Swiss cheese from a commercial standpoint is graded by the size, number and uniformity of the holes. Cheese that has a number of small holes (no holes at all is inferior grade. Pinholes are the result of the use of poor grades of milk, improper handling, or lack of cultures. Some of these defects are overcome by the use of certain kinds of bacteria kept in pure culture, particularly where the cheese is gassy or "nizler." The discovery of these bacteria was first made in the laboratory of the dairy division. The holes and flavor in Swiss cheese are developed by the use of another culture, an organism also discovered by the dairy division experts.

The Secret of Roquefort.  
Now consider what dairy division experts have accomplished with another cheese, the Roquefort—a cheese that grows better, the older it becomes.

It is difficult to imagine that two rational human beings would fight a duel over a piece of Roquefort cheese, yet some family writings are extant to that effect. However, these letters can be regarded as an accurate record, inasmuch as the author of them was a humble-minded person more famed for his inventive genius than for his adherence to the truth. Roquefort cheese, however, has been known for 20 centuries, and being considered the "king of all cheeses" during the last century, it is within the realm of possibility that not only one but several duels have been fought over it. Indeed, one might find after sufficient search that several wars have been waged in its behalf.

For centuries Roquefort cheese has been made from sheep's milk by peasants of southern France, and ripened in the famous caves of Roquefort. Within a radius of 100 miles of Roquefort, half a million sheep are pastured for the purpose of milk production. During the one six-months period of lactation, some of these sheep produce enough milk to make as much as 50 pounds of cheese. The cheese is manufactured on farms and in small factories throughout the region, and then sent to Roquefort to be cured in the caves. Several firms here located and consolidated control the world's supply of Roquefort cheese.

told the Americans afterward that the birds were being taken to catch hares and other game for their masters, and possibly also to catch more eagles.

Probably both stories were correct. Presently the men got up and went off carrying their burdens, about forty very large eagles and forty smaller ones. The smaller birds sat each upon a basket dangling from the man's shoulder pole. Each basket was apparently full of something or other, the Americans could not see what, but the larger eagles sat on the poles at the other end, and it was amusing to see them turning round and balancing themselves and generally settling themselves comfortably before setting off.

The men seemed not to have the least anxiety lest these fierce creatures, with their powerful beaks, should each take a nip out of the cheese nearest them as they went along.

Stockholders Must Be Native. Stockholders in private banks in Sweden must be natives of Sweden.

ever he said was spoken at the peril of his person. Such an offender might with impunity be kicked or horsewhipped by any one of the court, and he had no chance to retaliate. Everything he did was ridiculed, and whatever he said was treated as a great joke. If he were sarcastic his words were sneered at, or the persons who heard would look at each other and laugh, saying:

"What a remarkable proof of understanding in a fool!"

CURING ROQUE AT GROVE CITY, PA.



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The making of the cheese on the farm and its transportation to a central point for curing is suggestive of an arrangement that might prove applicable to the cheese industry in the United States. The cheese could be cured and ripened at less expense, and probably graded and marketed to better advantage, than under our present system.

It is curious to note that the caves in France have been formed by the slipping of the rocks at the base of the Cambrian mountains. Among them are subterranean grottoes and galleries through which currents of cool, moist air circulate with great rapidity, and through which tiny streams thread their way. The air currents coming in contact with the rocks produce rapid evaporation, as a result of which the temperature is often lowered to 40 degrees F. Many of the caves have been enlarged and artificial refrigeration used for the purpose of storing and curing the cheese at even lower temperatures.

The secret of making a fine Roquefort cheese turns upon the development of certain molds. To be sure, most people regard anything moldy as unfit for use. But in this case the mold is not harmful and must be present if good Roquefort flavor is to be developed. For several years the dairy division has been endeavoring to develop a green-mold cheese from cow's milk.

In the first place, it was impossible to secure employees familiar with the process of manufacture. It is not sufficient, as some people believe, to sprinkle some green mold on the curd in order to produce a Roquefort cheese. In the work of the dairy division, for a long time the mold failed to develop properly, and in many cases did not develop at all. Special artificial curing conditions had to be supplied. Ordinary refrigeration was not enough. To cure the cheese properly required a very low temperature with high relative humidity and considerable ventilation.

Make Our Own Caves.  
However, after years of experimental work, a special air-conditioning apparatus was perfected—an arrangement somewhat similar to that used in silk mills—by means of which curing conditions could be secured and maintained, and which were in fact quite comparable to the natural conditions that prevailed in the caves of Roquefort.

America had no Roquefort caves. Therefore it was necessary to build something just as good. And American scientists did it. Moreover, the French made Roquefort cheese from sheep's milk. During the past year, by the use of the equipment mentioned, Roquefort cheese has been made commercially from cow's milk for the first time in the United States, and marketed successfully in competition with the imported article. In fact, some critics have declared the cow's milk cheese to be superior to the imported sheep's milk product.

The worst criticism of the domestic product that has thus far been made is that the cheese is too yellow. With some commercial experience with the cheese there is every reason to believe that in the future some improvements in manufacture will be made so as to produce a cheese more uniform and perfect, and that eventually a cow's-milk Roquefort cheese will become one of the established varieties of cheese in the United States, if not in the world.

Washington Shaft  
Country's Tribute  
to Her Great Son

The two great monuments in the United States, of the many hundreds that have been erected in all parts of our country, are the Bunker Hill monument, in Boston, dedicated in 1843, a shaft to commemorate the beginning of our fight for independence, and the Washington monument, at Washington, erected to the memory of him who had been most instrumental in bringing about the result.

For 30 years after Washington's death the project was every now and then, suggested, but nothing definite happened until September, 1833, when the Washington National Monument society was formed, with Chief Justice John Marshall, then 73 years old, as president. It was not until three years later that advertisements were inserted inviting designs from American artists.

An effort was made to secure the funds by popular subscription and by 1847 \$87,000 was in hand and preparation for construction was begun. Congress, by resolution, granted a site where the monument now stands and the cornerstone was laid on the Fourth of July, 1848, in the presence of the executive, legislative and judicial branches of the government, foreign ministers and officers and a vast concourse of citizens from all parts of the Union.

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again in 1776, and finally in the Constitution of 1787. That the forefathers, with Washington and Jefferson and Lee in the lead in the constructive period of the Revolution, proved to be practical men, as well as idealists believing in certain great principles that lie at the base of human freedom, and established human liberty under conditions that protected each from the other, obliterating class distinctions, is not the least thing to their credit.

As pulpit and platform draw the lessons from what the past affords in the way of men and principles as exemplars for all time, it will be the part of wisdom if the simple, undigested facts as to what this great experiment did set out to do and has accomplished be brought home to all. For after all, it is the overwhelming actualities of a free government maintained by a free people that gives the huster to the name of Washington as the father and founder and justifies all that the most extravagant eulogy may pronounce as to his claims to an affectionate immortality.

His Fondness for Children.  
While Washington had no children of his own, he was blessed with many nephews and nieces, who, looking up to him as the head of the family, received many favors from his hand.

His sister Betty, Mrs. Fielding Lewis, had several boys, Washington, when nineteen, standing together to the eldest. Two of her boys, Howell and Lawrence, made their home with their famous uncle at Mount Vernon at different times. Another nephew, Bushrod, a son of Washington's brother, John Augustine, was an especial favorite. His career as a lawyer was helped by Washington, who followed it with the greatest pride and interest, and frequently consulted him on legal matters. The Mount Vernon mansion, its library and private papers, and 4,000 acres were left to this nephew.

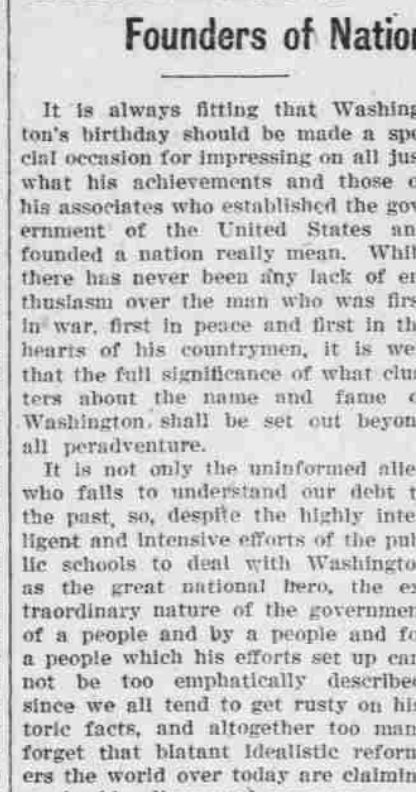
Of his brother Samuel's children Washington helped educate the three boys, and gave their sister Harriet a home under his own roof for nine years.—H. A. Ogden in St. Nicholas.

Spirit That Won Freedom.  
Let's try to learn, above everything else, how to fight, be beaten, fight again, and keep at it until at last we win.—George Washington.

Lesson in Honors to Founders of Nation  
It is always fitting that Washington's birthday should be made a special occasion for impressing on all just what his achievements and those of his associates who established the government of the United States and founded a nation really mean. While there has never been any lack of enthusiasm over the man who was first in war, first in peace and first in the hearts of his countrymen, it is well that the full significance of what clusters about the name and fame of Washington should be set out beyond all peradventure.

It is not only the uninformed alien who fails to understand our debt to the past, so, despite the highly intelligent and intensive efforts of the public schools to deal with Washington as the great national hero, the extraordinary nature of the government of a people and by a people and for a people which his efforts set up cannot be too emphatically described, since we all tend to get rusty on historic facts, and altogether too many forget that blatant idealistic reformers the world over today are claiming as freshly discovered panaceas some of the simplest practices laid down by the forefathers in the Mayflower.

Washington Monument in the City of Richmond, Virginia.



Washington Monument in the City of Richmond, Virginia.

Washington's Practical Side  
Pretty nearly everybody has heard that Washington was a farmer, but just how much of a farmer he was has only recently been shown by the collection and publication of his agricultural letters. Washington, it appears, corresponded with Mr. Arthur Young of England, one of the great agricultural experts of his time; and also wrote about agriculture to Thomas Jefferson and others. The letters show that the Father of His Country was a farmer in quite a modern sense,

and that he kept his crop accounts, and knew what each field had done and was doing, with an exactness that many a farmer today would find wise and profitable. It is evident, too, that Washington did not allow public affairs to prevent him from keeping in close touch with his private agricultural affairs.

Always a Practical Farmer.  
George Washington was a good farmer. When he once needed a farm manager he described the man he wanted in a letter as "above all, Midas like, one who can convert everything he touches into manure, as the first transmutation toward gold."

Keen Insight Into Future.  
In a free and republican government you cannot restrain the voice of the multitude. Every man will speak as he thinks, or, more properly, without thinking, and consequently will judge of effects without attending to their causes.—George Washington.

To THE FOREIGN LEGION.  
A Legionnaire was seen to salute the statue of Washington that stands on the treasury steps.—The Reporter.

No mortal man can make the spirit mute That moved you to go gallant a salute. It is a deathless spirit that makes one All fearless men like you and Washington.

Accept the tribute of his outstretched hand As symbol of our love, heroic band.—Fanny De Groot Hastings.

# WRIGLEY'S "After Every Meal" Everywhere

All over the world people use this goodly for its benefits, as well as its pleasure.

Keeps teeth clean, breath sweet, throat soothed.



Sealed Tight—Kept Right  
Thousands of Happy Housewives in WESTERN CANADA

are helping their husbands to prosper—are glad they encouraged them to go where they could make a home of their own—save paying rent and reduce cost of living—where they could reach property and independence by buying on easy terms.

Fertile Land at \$15 to \$30 an Acre  
Land similar to that which through many years has yielded from 20 to 45 bushels of wheat to the acre. Hundreds of farmers in Western Canada have raised crops in a single season worth more than the whole cost of their land. With such crops come prosperity, independence, good homes, and all the comforts and conveniences which make for happy living.

Farm Gardens—Poultry—Dairying  
are sources of income second only to grain growing and stock raising. Good climate, good neighbors, churches, schools, rural telephone, etc., give you the opportunity to run a home with the conveniences of old settled districts.

For illustrated literature, maps, description of farm opportunities in British Columbia, Alberta, and Saskatchewan, and a list of agents, please write to the Canadian Government Agents, W. S. BRYANT, Room 22, International Station, Vancouver, B. C., or to the Canadian Government Agents, 215 Franklin Building, Winnipeg, Man., or to the Canadian Government Agents, 215 Franklin Building, Winnipeg, Man., or to the Canadian Government Agents, 215 Franklin Building, Winnipeg, Man.

MONEY IN BREEDING MUSSELS EVERYTHING WAS ALL RIGHT

United States Fisheries Bureau Reports That a Profit May Confidently Be Looked For.

Judge Couldn't Be Spoiling the Water When He Didn't Use Any Soap in the Bath.

The business of breeding pearls artificially has been carried so far by the United States fisheries bureau that a money profit is confidently promised.

To produce in this way 1,000 baby mussels costs about 20 cents. When they are full grown 18,000 of them will weigh a ton. Thus the cost of producing a ton of pearls mussels of market size (if all survived) would be, as an exact reckoning, \$2.68. Assuming a loss of 50 per cent, the cost would be \$5.36.

Pearly mussels occasionally yield valuable pearls, but commercially it is the shells, suitable for mother-of-pearl, that are importantly to be considered.

The fisheries bureau has devoted its attention wholly to the propagation of superior varieties of mussels, the shells of which have at present time a market value of \$35 a ton.

Giving Up.  
She—A woman has to give up a great deal after she gets married.

He—A man does nothing else but give up after he gets married.—Boston Transcript.

A Good Many Like Him.  
Friend—I read that book you illustrated. Artist—"I didn't. How did the illustrations fit?"

The longer you boil POSTUM CEREAL the better it is

Your reward will be such richness of flavor as would please most coffee or tea drinkers.

This pure, wholesome cereal drink contains nothing harmful. Its regular use proves a comfort and an economy.

Try POSTUM CEREAL

"There's a Reason"

Sold by grocers everywhere

Made by Postum Cereal Co., Inc., Battle Creek, Mich.

## Traveled With Live Eagles

Chinese Traders, Apparently Without Fear, Carried Shoulder Birds, One on Each Shoulder.

During a journey from Peking to Kalgan, in China, some American engineers were favored by a most extraordinary sight. Near a beautiful temple they came upon a great company of men, carrying

FRESHEN ROSES.  
Roses will give much greater return if, before they are put into the water, the ends of the stems are crushed or mashed. Then when the rose wilts cut off the end of the stem, slit it in half for about one half inch, hold the ends in boiling water for a few minutes, then plunge the stems in cold water. The rose will be as fresh as new. Do this at night and let the roses stand in a deep pitcher of water all night before placing them in the vase.

## Fools Made by Royal Whim

Russian Czar Had Novel Method of Disciplining Those of His Court Who Displeased Him.

Peter the Great was less successful as a jokester than he was as a shipwright. He seemed to concentrate his wit upon one formula. Humor to him seemed to consist of making fun of

fools or of reducing to the state of fools those who displeased him.

For whenever a noble offended Peter, that noble, by an imperial order, was designated a fool. From the instant of the publication of the decree the unfortunate victim, no matter how intelligent he was, became the laughing stock of the entire court. He was permitted to talk, but what